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09/446,508	12/27/1999	KEIJO PALVIAINEN	PM265414	2423
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PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			BEAMER, TEMICA M	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/446,508  
Filing Date: December 27, 1999  
Appellant(s): PALVIAINEN, KEIJO

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Carlo M. Cotrone  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 13, 2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

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**(7) Grouping of Claims**

The rejection of claims 1-22 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

6,134,433	Joong et al	10-2000
6,134,220	Le Strat et al	10-2000
5,388,095	Seraj	2-1995

**(10) Grounds of Rejection*****Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joong et al (Joong), U.S. Patent No. 6,134,433 in view of Le Strat et al (Le Strat), U.S. Patent No. 6,134,220.

Regarding claim 1, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one forwarding exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one subscriber database for storing the subscriber data related to the call forwarding, the method comprising the steps of receiving at the forwarding exchange a call set-up message addressed to a subscriber in the mobile system [col. 5: lines 36-47], performing a subscriber data request to the subscriber database [col. 5: lines 40-45], transmitting a response message from the subscriber database to the forwarding exchange, the message comprising data indicating the call forwarding, a forwarding number [col. 5: lines 45-56], and a basic service code [col. 6: lines 28-33], and implementing call routing to the forwarding number by selecting one of said alternative lines based on the basic service code [col. 6: lines 21-43, col. 8, lines 48-59].

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

In a similar field of endeavor, Le Strat discloses a cellular system that handles voice calls and data calls (col. 2, lines 18-26, col. 9, lines 50-53). Le Strat further discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 22, the combination of Joong and Le Strat discloses the method according to claim 1, wherein selecting of the alternative types of lines include at least one of line quality, line capacity and line cost (Le Strat, col. 4, lines 41-50).

Regarding claim 2, Joong discloses a method for implementing call forwarding in a mobile system comprising at least a first exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one home location register connected to the first exchange for storing the subscriber data related to the call forwarding, the method comprising receiving at the first exchange a call set-up message addressed to a subscriber in the mobile system, requesting routing information from the home location register to the first exchange, the message comprising data indicating the call forwarding, a forwarding number, and a basic service code indicating the basic service related to the call, and implementing call routing to the forwarding number by selecting one of said alternative types of lines based on the basic service code [col. 5: line 36 - col. 6: line 43, col. 8, lines 48-59].

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 3, the combination of Joong and Le Strat discloses the method of claim 2, wherein the basic service code is forwarded from the home location register to the first exchange via an extension added to the response message Send\_Routing\_Info\_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 4, Joong discloses a method for implementing call forwarding in a mobile system comprising at least one exchange for carrying out call forwarding via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59) on the basis of subscriber data related to the call forwarding and at least one visitor location register for storing the subscriber data related to the call forwarding, the method comprising receiving at the exchange a call set-up message addressed to a subscriber in the mobile system, providing a subscriber data request to the visitor location register connected to the exchange, transmitting a response message from the visitor location register to the exchange, the message comprising data indicating the call forwarding, a forwarding number and a basic service code and implementing call routing to the forwarding number according to the basic service code (col. 5: line 36 - col. 6: line 65).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 5, Joong discloses a home location register connected to a first exchange in a mobile system, wherein the home location register is arranged to transmit a basic service code to the first exchange in connection with a response message to a routing information request, the basic service code indicating the necessary properties of the line which should be selected from several types of lines in routing the call (col. 6: lines 10-43, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).



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Regarding claim 21, the combination of Joong and Le Strat discloses an HLR according to claim 5, wherein the necessary properties include at least one of line quality, line capacity and line cost (Le Strat, col. 4, lines 41-50).

Regarding claim 6, the combination of Joong and Le Strat discloses wherein the home location register is arranged to forward the basic service code to the first exchange by means of an extension added to the response message Send\_Routing\_Info\_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 7, Joong discloses a first exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59), wherein the exchange is arranged to derive a basic service code from the call set-up message or from a response message transmitted by the home location register to the first exchange in response to a subscriber data request, and the exchange is arranged to route the call to the forwarding number by selecting one of said alternative types of lines based on the basic service code (col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of

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allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 8, the combination of Joong and Le Strat discloses the exchange of claim 7, wherein the exchange is arranged to receive the basic service code in an extension added to the response message Send\_Routing\_Info\_RES to the routing information request (Joong, col. 6: lines 44-65).

Regarding claim 9, the combination of Joong and Le Strat discloses the exchange according to claim 7, wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that said exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code (Joong, col. 4: lines 30-44).

Regarding claim 10, the combination of Joong and Le Strat discloses the exchange according to claim 7, wherein the exchange is arranged to subject the forwarding number to a conversion selected according to the basic service code (Joong, col. 6: lines 21-43).

Regarding claim 11, Joong discloses an exchange in a mobile system, comprising means for transferring a call to a forwarding number via one of several alternative types of lines (i.e. analog/digital speech and data lines, see col. 8, lines 48-59), wherein the exchange is arranged to derive a basic service code from basic service data that indicates the basic service of the call and that is transmitted in connection with the call set-up message or a response message transmitted from the visitor location register to the exchange in response to a subscriber data request, and the exchange is

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arranged to perform routing to the forwarding number by selecting one of said alternative types of lines based on the basic service code (col. 5: line 36 - col. 6: line 65, col. 8, lines 48-59).

Joong, however, fails to specifically disclose wherein each type of line has different qualities.

Le Strat discloses wherein the type of quality desired for a voice/data call can be selected (col. 4, lines 26-50, col. 9, lines 16-56, col. 10, lines 21-58).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Joong with the teachings of Le Strat for the purpose of allowing a user more freedom in choosing the desired quality of a call to possibly lower the amount of resources used in the call (col. 4, lines 41-50).

Regarding claim 12, the combination of Joong and Le Strat discloses the exchange according to claim 11, wherein the exchange is arranged to derive the basic service code at least on the basis of the bearer capability information element contained in the basic service data (Joong, col. 6: line 21 -28).

Regarding claim 13, the combination of Joong and Le Strat discloses the exchange according to claim 11, wherein the forwarding number is the number of a Voice Mail Service center having several lines, and that the exchange is arranged to transfer the call to the Voice Mail Service center via a line selected for the transfer according to the basic service code (Joong, col. 4: lines 30-44).

Regarding claim 14, the combination of Joong and Le Strat discloses exchange according to claim 11, wherein the exchange is arranged to subject the forwarding

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number to a conversion selected according to the basis service code (Joong, col. 6: lines 21-43).

3. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joong, Le Strat and Seraj, U.S. Patent No. 5,388,095.

Regarding claims 15-20, the combination of Joong and Le Strat discloses the limitations of claims 1, 2, 4, 5, 7 and 11 as described above and further discloses wherein the basic service/code includes different call types for the subscriber (Joong, i.e. analog/digital speech and data lines, see col. 8, lines 48-59).

The combination, however, fails to specifically disclose wherein the different types of calls have a single called party number.

In a similar field of endeavor, Seraj discloses representation of subscribers in a multiple interface environment. Seraj further discloses wherein different interfaces belonging to one subscriber have a single called party number (col. 2, lines 20-51).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Joong and Le Strat with the teachings of Seraj since such a feature (single called party number) would limit the amount of telephone numbers one would have to remember when needing to contact someone having multiple communication devices.

**(11) Response to Argument**

Regarding claims 1-4, 7, 8, 11, 12 and 22, appellant argues that Joong and Le Strat do not teach or suggest the presently claimed invention. Specifically, for claim 1, appellant argues, on pages 8-11 of the brief, that Joong fails to disclose call forwarding by selecting a suitable line among several alternative lines of different quality based on a service code. Appellant goes on to say that Joong clearly does not contemplate the provision of alternative lines of different quality to which a call alternately can be routed (page 9, paragraph 2). Appellant also states that Joong may be said to teach away from the claimed invention since it teaches that calls are forwarded to the line appropriate to the type of call.

The examiner, however, disagrees with the above arguments. At the outset, independent claim 1, requires that a call should be routed to a forwarding number by selecting one of said alternative types of lines based on a basic service code. Although claim 1 states in the preamble that call forwarding is carried out via one of several alternative types of lines on the basis of subscriber data related to the call forwarding, wherein each type of line has different qualities, the selection of the type of line discussed in the body of the claim is solely based on the basic service code and not the quality of the lines. The preamble and the body do not tie in the selection of the types of lines in accordance with line quality.

Joong specifically teaches a system and method of providing service differentiation for call forwarding based upon the type of call (col. 2, lines 60-62). Joong further teaches wherein the system has different types of lines (i.e., voice, fax, etc.) that

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are selected for a given call based on a service code transmitted with call transfer information (col. 5, line 27-col. 6, line 33 and col. 8, lines 10-47). Such teaching in Joong meets the claimed limitations of independent claim 1.

As stated above, claim 1 does not require that the line selection be based on the quality of the line. The preamble only requires that the alternative types of lines each have different qualities, therefore, Joong was only combined with Le Strat to specifically meet the ad-hoc limitation of types of lines having different qualities.

Le Strat discloses a system that handles voice and data calls (col. 2, lines 18-26 and col. 9, lines 50-53). Le Strat further discloses wherein the voice and data calls can have different qualities (col. 4, lines 26-50, col. 9, lines 16-56 and col. 10, lines 21-58).

Therefore, based on the claim language of claim 1, the combination of Joong and Le Strat meets the claimed invention.

Regarding independent claim 2, appellant argues on page 11 of the brief, the same features of independent claim 1. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claim 3 (which is dependent on claim 2), appellant argues on page 11 of the brief, the same features of independent claim 2. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding independent claim 4, appellant argues on page 11 of the brief, the same features of independent claim 1. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding independent claim 7, appellant argues on pages 11-12 of the brief, the same features of independent claim 1. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claim 8 (which is dependent on claim 7), appellant argues on page 12 of the brief, the same features of independent claim 8. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding independent claim 11, appellant argues on page 12 of the brief, the same features of independent claim 1. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claim 12 (which is dependent on claim 11), the appellant argues on page 12 of the brief, the same features of independent claim 8. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claims 9 and 13, the appellant argues that Joong fails to disclose a voice mail service (VMS) center that has several lines, wherein a call is transferred to the VMS via a line selected for the transfer according to the basic service code.

The examiner, however, disagrees. Joong discloses a VMS center (13) coupled to a telecommunications network (10) (col. 14, lines 31-65; figure 1). The VMS inherently has several lines based on the inherent fact that the VMS center services multiple subscribers that have different numbers. It should also be pointed out that the lines claimed in claims 9 and 13 are different than the lines claimed in the independent claims 7 and 11 in that the lines claimed in independent claims 7 and 11 discuss "alternative types of lines".

Further, with regards to claims 9 and 13, the call is transferred to the VMS center via a line selected for the transfer according to the basic service code. This limitation is met based on the explanations given above with respect to claims 1-4 (i.e., the system in Joong having different types of lines [voice, fax, etc.] that are selected for a given call based on a service code transmitted with the call transfer information, col. 5, line 27-col. 6, line 33 and col. 8, lines 10-47). Also, it is taught that such calls are diverted to their appropriate storage devices in the event the call is unanswered (col. 4, lines 31-44).

Regarding claims 10 and 14, the appellant argues on page 13 of the brief, the same features of independent claims 7 and 11. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claims 5, 6 and 21, the appellant argues on page 12 of the brief, the same features of claims 1-4. As such, the examiner maintains that the combination of Joong and Le Strat teaches the claimed invention.

Regarding claims 15-20, which depend on claims 1, 2, 4, 7, 11 and 5, respectively), the appellant argues that because Seraj fails to remedy the deficiencies of Joong and Le Strat, the rejection should be withdrawn. However, as demonstrated above with reference to independent claims 1, 2, 4, 5, 7 and 11, the combination of Joong and Le Strat does meet the presently claimed invention.



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For the above reasons, it is believed that the rejections should be sustained.

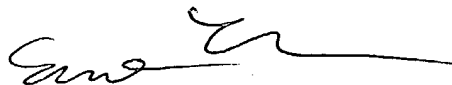
Respectfully submitted,

Temica M. Beamer  
Examiner  
Art Unit 2681

November 26, 2004

Conferees:

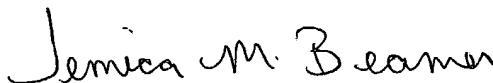
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